**Implicit Intent**

**Objective:** The objective of this Android program is to demonstrate the use of **implicit intents**. Specifically, the program allows a user to open a web browser by clicking a button. The application uses an implicit intent to request an action (Intent.ACTION\_VIEW) without specifying the component (activity) that should handle the intent. Instead, it allows the Android system to choose an appropriate application (e.g., a browser) to handle the request, based on the type of data provided (a URL).

**XML Code:**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/editText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Enter Url"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.384" />  
  
 <Button  
 android:id="@+id/btn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:onClick="search"  
 android:text="Search"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/editText"  
 app:layout\_constraintVertical\_bias="0.221" />  
  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Saksham Gupta"  
 android:textSize="25sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.551"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/btn"  
 app:layout\_constraintVertical\_bias="0.899" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Java Code:**

package com.example.implicit;  
  
import android.content.Intent;  
import android.net.Uri;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
  
  
import androidx.appcompat.app.AppCompatActivity;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 EditText editText;  
 Button button;  
  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 button = findViewById(R.id.*btn*);  
 editText = (EditText) findViewById(R.id.*editText*);  
  
 button.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 String url=editText.getText().toString();  
 Intent intent = new Intent(Intent.*ACTION\_VIEW*, Uri.*parse*(url));  
 startActivity(intent);  
 }  
 });  
 }  
}

**Output:**

**Explicit Intent**

**Objective:** The objective of this Android program is to demonstrate the use of **explicit intents** to navigate between activities within the same application. Explicit intents allow developers to explicitly specify the target activity to be started by providing its class name.

**XML Code(activity\_main.xml):**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <TextView  
 android:id="@+id/editText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Welcome to GFG Home Screen"  
 android:textAlignment="center"  
 android:textSize="28sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.359" />  
  
 <Button  
 android:id="@+id/btn1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:onClick="newsScreen"  
 android:text="Go to News Screen"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/editText"  
 app:layout\_constraintVertical\_bias="0.212" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Saksham Gupta"  
 android:textSize="25sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.568"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/btn1"  
 app:layout\_constraintVertical\_bias="0.802" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Java Code(MainActivity.java):**

package com.example.explicit;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Toast;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 }  
 public void newsScreen(View view){  
 Intent i = new Intent(getApplicationContext(), MainActivity2.class);  
 startActivity(i);  
  
 Toast.*makeText*(this, "Activity two called", Toast.*LENGTH\_SHORT*).show();  
 }  
}

**XML Code(activity\_main2.xml):**

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:id="@+id/main"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity2">  
  
 <TextView  
 android:id="@+id/editText"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Welcome to GFG News Screen"  
 android:textAlignment="center"  
 android:textSize="28sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.297" />  
  
 <Button  
 android:id="@+id/btn2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:onClick="homeScreen"  
 android:text="Go to Home Screen"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/editText"  
 app:layout\_constraintVertical\_bias="0.241" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Saksham Gupta"  
 android:textSize="25sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.512"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/btn2"  
 app:layout\_constraintVertical\_bias="0.899" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Java Code(MainActivity2.java):**

package com.example.explicit;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Toast;  
  
import androidx.activity.EdgeToEdge;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.graphics.Insets;  
import androidx.core.view.ViewCompat;  
import androidx.core.view.WindowInsetsCompat;  
  
public class MainActivity2 extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main2*);  
  
 }  
  
 public void homeScreen(View view) {  
 Intent i = new Intent(getApplicationContext(), MainActivity.class);  
 startActivity(i);  
 Toast.*makeText*(this, "Activity one called", Toast.*LENGTH\_SHORT*).show();  
 }  
  
}

**Output:**